

AK



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,852	02/17/2000	TOSHIYUKI MOGI	500.38228XOO	2849

20457 7590 08/01/2003

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

BROCK II, PAUL E

ART UNIT	PAPER NUMBER
----------	--------------

2815

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/485,852

Applicant(s)

MOGI ET AL.

Examiner

Paul E Brock II

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15, 16 and 39-46 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 March 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Invention II, claims 39 – 46, in Paper No. 16 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 15 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 16.

### *Claim Objections*

3. Claim 41 is objected to because of the following informalities: The second recitation of "is enabled to pass" is repetitive and should be deleted. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 39 – 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blauvelt et al. (USPAT 5127072, Blauvelt) in view of Tabuchi (JPPAT 05183185).

With regard to claim 39, Blauvelt discloses in figures 1 and 2 a light transmitting module. Blauvelt discloses in figures 1 and 2 a substrate (10). Blauvelt discloses in figures 1 and 2 an optical fiber (38) disposed on one surface of the substrate. Blauvelt discloses in figures 1 and 2 an edge emitting/incidence type light receiving element (29) having a layer disposed on the one surface of the substrate. Blauvelt discloses in figures 1 and 2 and column 3, lines 3 – 8 wherein the layer of the edge emitting/incidence type light receiving element includes a light absorbing portion. Blauvelt does not teach wherein the edge emitting/incidence type light receiving element includes another portion which is a non-light absorbing portion and which defines a space region of the layer. Tabuchi teaches in figures 11 and 20 wherein a layer of an edge emitting/incidence type light receiving element (1) includes a light absorbing portion (23) and another portion (25) which is a non-light absorbing portion and which defines a space region of the layer. It would have been obvious to one of ordinary skill in the art at the time of the present invention to use the edge emitting/incidence type light receiving element of Tabuchi in the device of Blauvelt in order to improve the coupling efficiency with an optical fiber as stated by Tabuchi in the Object section.

With regard to claim 40, Tabuchi teaches in figures 11 and 20 wherein the light absorbing portion of the layer at least partially surrounds the another portion of the layer which is the non-light absorbing portion and which defines the space region of the layer.

With regard to claim 41, it should be noted that the limitation drawn to positioning the edge emitting/incidence type light receiving element is an intended use/method of using recitation which bears no patentable weight in a device claim. Therefore, Blauvelt and Tabuchi teach wherein the edge emitting/incidence type light receiving element is positioned on the one

Art Unit: 2815

surface of the substrate by projecting a light having a wavelength which is absorbed by the light absorbing portion of the layer and which is enabled to pass the another portion of the layer which is said non-light absorbing portion which defines the space region.

With regard to claim 42, Tabuchi teaches in figures 11 and 20 wherein the edge emitting/incidence type light receiving element is a semiconductor light receiving element.

With regard to claim 43, Blauvelt discloses in figures 1 and 2 wherein the optical fiber is optically coupled to the light receiving element. It is further obvious in the device of Blauvelt and Tabuchi that the optical fiber is optically coupled to the semiconductor light receiving element.

With regard to claim 44, Blauvelt discloses in figures 1 and 2 further comprising a semiconductor laser (28) mounted on the substrate, the light receiving element being optically coupled to the semiconductor laser. It is further obvious in the device of Blauvelt and Tabuchi that the semiconductor light receiving element is optically coupled to the semiconductor laser.

6. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blauvelt and Tabuchi as applied to claims 39, and 42 – 43 above, and further in view of Tokuda (USPAT 5608456).

Blauvelt discloses in figures 1 and 2 packaging the semiconductor light receiving element. Blauvelt and Tabuchi do not teach wherein the semiconductor light receiving element disposed on the substrate is configured by being packaged with either ceramic or resin. Tokuda teaches in figure 8 and column 1, lines 23 – 27 a semiconductor light receiving element (1) disposed on a substrate is configured by being packaged with either ceramic or resin. It would

Art Unit: 2815

have been obvious to one of ordinary skill in the art at the time of the present invention to use the packaging of Tokuda in the device of Blauvelt and Tabuchi in order to protect the light receiving element as stated by Tokuda in column 1, lines 23 – 27.

### *Response to Arguments*

7. Applicant's arguments with respect to claims 39 – 46, filed December 16, 2002 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E Brock II whose telephone number is (703)308-6236. The examiner can normally be reached on 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703)308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Paul E Brock II  
July 24, 2003

A handwritten signature in black ink, appearing to read "Paul E Brock II", written over a horizontal line.